

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently amended) A substantially pure preparation of a plasmin inhibitor characterised in that it is a single stage competitive inhibitor of plasmin, wherein “substantially pure” means that at least 60% of the total material in the preparation is the plasmin inhibitor, **and wherein the plasmin inhibitor comprises a polypeptide with at least 90% sequence identity to one selected from the group consisting of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, SEQ ID NO:12, and** the general formula: **KDZPZYCZLBBZBGXCZXXXBXFÄYXBZZZZCBZFBYGGCXBNANNFXTXEECE** **STCAA (I) (SEQ ID NO 67), wherein:**

X is any amino acid selected from the group consisting of Ala, Arg, Asn, Asp, Cys, Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val, α-aminobutyric acid, L-N-methylalanine, α-amino-α-methylbutyrate, L-N-methylarginine, aminocyclopropane-carboxylate, L-N-methylasparagine, aminoisobutyric acid, L-N-methylaspartic acid, aminonorbornyl-carboxylate, L-N-methylcysteine, cyclohexylalanine, L-N-methylglutamine, cyclopentylalanine, L-N-methylglutamic acid, L-N-methylisoleucine, L-N-methylhistidine, D-alanine, L-N-methylleucine, D-arginine, L-N-methyllysine, D-aspartic acid, L-N-methylmethionine, D-cysteine, L-N-methylnorleucine, D-glutamate, L-N-methylnorvaline, D-glutamic acid, L-N-methylornithine, D-histidine, L-N-methylphenylalanine, D-isoleucine, L-N-methylproline, D-leucine, L-N-medylserine, D-lysine, L-N-methylthreonine, D-methionine, L-N-methyltryptophan, D-ornithine, L-N-methyltyrosine, D-phenylalanine, L-N-methylvaline, D-proline, L-N-methylethylglycine, D-serine, L-N-methyl-t-butylglycine, D-threonine, L-norleucine, D-tryptophan, L-norvaline, D-tyrosine, α-methyl-aminoisobutyrate, D-valine, α-methyl-γ-aminobutyrate, D-α-methylalanine, α-methylcyclohexylalanine, D-α-methylarginine, α-

methylcyclopentylalanine, D- α -methy lasparagine, α -methyl- α -naphthylalanine, D- α -methy laspartate, α -methylpenicillamine, D- α -methylcysteine, N-(4-aminobutyl)glycine, D- α -methylglutamine, N-(2-aminoethyl)glycine, D- α -methylhistidine, N-(3-aminopropyl)glycine, D- α -methylisoleucine, N-amino- α -methylbutyrate, D- α -methylleucine, α -naphthylalanine, D- α -methyllysine, N-benzylglycine, D- α -methylmethionine, N-(2-carbamylethyl)glycine, D- α -methylornithine, N-(carbamylmethyl)glycine, D- α -methylphenylalanine, N-(2-carboxyethyl)glycine, D- α -methylproline, N-(carboxymethyl)glycine, D- α -methylserine, N-cyclobutylglycine, D- α -methylthreonine, N-cycloheptylglycine, D- α -methyltryptophan, N-cyclohexylglycine, D- α -methyltyrosine, N-cyclodecylglycine, L- α -methylleucine, L- α -methyllysine, L- α -methylmethionine, L- α -methylnorleucine, L- α -methylnorvaline, L- α -methylornithine, L- α -methylphenylalanine, L- α -methylproline, L- α -methylserine, L- α -methylthreonine, L- α -methyltryptophan, L- α -methyltyrosine, L- α -methylvaline, L-N-methylhomophenylalanine, N-(N-(2,2-diphenylethyl carbamylmethyl)glycine, N-(N-(3,3-diphenylpropyl carbamylmethyl)glycine, and 1-carboxy-1-(2,2-diphenyl-ethyl amino)cyclopropane;

\ddot{Y} is a hydrophobic amino acid;

\tilde{A} is an aromatic amino acid;

Z is K, R, H, D, E, Q or N; and

B is a neutral amino acid, or P, A, G, S, T, V or L.

2. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $1 \times 10^{-8} \text{ M}^{-1}$ to $1 \times 10^{-10} \text{ M}^{-1}$.
3. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $5 \times 10^{-8} \text{ M}^{-1}$ to $8 \times 10^{-9} \text{ M}^{-1}$.

4. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation constant for plasmin in the range of from $1 \times 10^{-9} \text{ M}^{-1}$ to $5 \times 10^{-9} \text{ M}^{-1}$.
5. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $4 \times 10^{-5} \text{ sec}^{-1} \text{ M}^{-1}$ to $5 \times 10^{-7} \text{ sec}^{-1} \text{ M}^{-1}$.
6. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $1 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$ to $1 \times 10^{-7} \text{ sec}^{-1} \text{ M}^{-1}$.
7. (Original) The plasmin inhibitor of claim 1 further characterised in that it has a dissociation rate constant for plasmin in the range of from $2 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$ to $9 \times 10^{-6} \text{ sec}^{-1} \text{ M}^{-1}$.
8. (Currently Amended) The plasmin inhibitor of claim 1, wherein the comprising a polypeptide is selected from the group consisting of: SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:10, and SEQ ID NO:12.

(a) — ~~Lys Asp Arg Pro Asp Phe Cys Glu Leu Pro Ala Asp Thr Gly Pro Cys Arg Val Arg Phe Pro Ser Phe Tyr Tyr Asn Pro Asp Glu Lys Lys Cys Leu Glu Phe Ile Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr Cys Ala Ala~~ [SEQ ID NO:2];

(b) — ~~Lys Asp Arg Pro Glu Leu Cys Glu Leu Pro Pro Asp Thr Gly Pro Cys Arg Val Arg Phe Pro Ser Phe Tyr Tyr Asn Pro Asp Glu Gln Lys Cys Leu Glu Phe Ile Tyr Gly Gly Cys Glu Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu Cys Glu Ser Thr Cys Ala Ala~~ [SEQ ID NO:4];

(c) — ~~Lys Asp Arg Pro Asn Phe Cys Lys Leu Pro Ala Glu Thr Gly Arg Cys Asn Ala Lys Ile Pro Arg Phe Tyr Tyr Asn Pro Arg Gln His Gln Cys Ile Glu Phe Leu Tyr Gly Gly Cys Gly Gly Asn Ala Asn Asn Phe Lys Thr Ile Lys Glu Cys Glu Ser Thr Cys Ala Ala~~ [SEQ ID NO:6];

~~(d) — Lys Asp His Pro Lys Phe Cys Glu Leu Pro Ala Glu Thr Gly Ser Cys
Lys Gly Asn Val Pro Arg Phe Tyr Tyr Asn Ala Asp His His Gln Cys Leu Lys
Phe Ile Tyr Gly Gly Cys Gly Gly Asn Ala Asn Asn Phe Lys Thr Ile Glu Glu
Gly Lys Ser Thr Cys Ala Ala [SEQ ID NO:8];~~

~~(e) — Lys Asp Arg Pro Lys Phe Cys Glu Leu Leu Pro Asp Thr Gly Ser Cys
Glu Asp Phe Thr Gly Ala Phe His Tyr Ser Thr Arg Asp Arg Glu Cys Ile Glu
Phe Ile Tyr Gly Gly Cys Gly Gly Asn Ala Asn Asn Phe Ile Thr Lys Glu Glu
Cys Glu Ser Thr Cys Ala Ala [SEQ ID NO:10]; and~~

~~(f) — Lys Asp Arg Pro Lys Phe Cys Glu Leu Pro Ala Asp Ile Gly Pro Trp
Asp Asp Phe Thr Gly Ala Phe His Tyr Ser Pro Arg Glu His Glu Cys Ile Glu
Phe Ile Tyr Gly Gly Cys Lys Gly Asn Ala Asn Asn Phe Asn Thr Gln Glu Gln
Cys Glu Ser Thr Cys Ala Ala [SEQ ID NO:12].~~

9. (Currently Amended) The plasmin inhibitor of claim 1, wherein the comprising a polypeptide is having the general formula:

~~KDZPZY²CZLBBZBGXCZXXXBXF²YXBZZZZCBZFBYGGCXBNANNFXTXEECE
STCAA (I) (SEQ ID NO 67), — wherein:~~

~~X — is any amino acid selected from the group consisting of Ala, Arg, Asn, Asp, Cys,
Gln, Glu, Gly, His, Ile, Leu, Lys, Met, Phe, Pro, Ser, Thr, Trp, Tyr, Val, α -
aminobutyric acid, L-N-methylalanine, α -amino- α -methylbutyrate, L-N-
methylarginine, aminocyclopropane-carboxylate, L-N-methylasparagine,
aminoisobutyric acid, L-N-methylaspartic acid, aminonorbornyl-carboxylate,
L-N-methyleysteine, cyclohexylalanine, L-N-methylglutamine,
cyclopentylalanine, L-N-methylglutamic acid, L-N-methylisoleucine, L-N-
methylhistidine, D-alanine, L-N-methylleucine, D-arginine, L-N-methyllysine,
D-aspartic acid, L-N-methylmethionine, D-cysteine, L-N-methylnorleucine, D-
glutamate, L-N-methylnorvaline, D-glutamic acid, L-N-methylornithine, D-
histidine, L-N-methylphenylalanine, D-isoleucine, L-N-methylproline, D-
leucine, L-N-methylserine, D-lysine, L-N-methylthreonine, D-methionine, L-N-~~

~~methyltryptophan, D-ornithine, L-N-methyltyrosine, D-phenylalanine, L-N-methylvaline, D-proline, L-N-methylethylglycine, D-serine, L-N-methyl-t-butylglycine, D-threonine, L-norleucine, D-tryptophan, L-norvaline, D-tyrosine, α -methyl-aminoisobutyrate, D-valine, α -methyl- γ -aminobutyrate, D- α -methylalanine, α -methylecyclohexylalanine, D- α -methylarginine, α -methylecyclopentylalanine, D- α -methylassparagine, α -methyl- α -naphthylalanine, D- α -methylasspartate, α -methylpenicillamine, D- α -methyleysteine, N-(4-aminobutyl)glycine, D- α -methylglutamine, N-(2-aminoethyl)glycine, D- α -methylhistidine, N-(3-aminopropyl)glycine, D- α -methylisoleucine, N-amino- α -methylbutyrate, D- α -methyllucine, α -naphthylalanine, D- α -methyllysine, N-benzylglycine, D- α -methylmethionine, N-(2-carbamylethyl)glycine, D- α -methylornithine, N-(carbamylmethyl)glycine, D- α -methylphenylalanine, N-(2-carboxyethyl)glycine, D- α -methylproline, N-(carboxymethyl)glycine, D- α -methylserine, N-cyclobutylglycine, D- α -methylthreonine, N-cycloheptylglycine, D- α -methyltryptophan, N-cyclohexylglycine, D- α -methyltyrosine, N-cyclodecylglycine, L- α -methyllucine, L- α -methyllysine, L- α -methylmethionine, L- α -methylnorleucine, L- α -methylnorvaline, L- α -methylornithine, L- α -methylphenylalanine, L- α -methylproline, L- α -methylserine, L- α -methylthreonine, L- α -methyltryptophan, L- α -methyltyrosine, L- α -methylvaline, L-N-methylhomophenylalanine, N-(N-(2,2-diphenylethyl-carbamylmethyl)glycine, N-(N-(3,3-diphenylpropyl-carbamylmethyl)glycine, and 1-carboxy-1-(2,2-diphenyl-ethyl-amino)cyclopropane;~~

~~\ddot{Y} is a hydrophobic amino acid;~~

~~\tilde{A} is an aromatic amino acid;~~

~~Z is K, R, H, D, E, Q or N; and~~

~~B is a neutral amino acid, or P, A, G, S, T, V or L.~~

10. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 3 is H or R.
11. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 5 is K, N, E or D.
12. (Original) The plasmin inhibitor of claim 9, wherein the \ddot{Y} at position 6 is F or L.

13. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 8 is E or K.
14. (Original) The plasmin inhibitor of claim 9, wherein the B at position 10 is P or L.
15. (Original) The plasmin inhibitor of claim 9, wherein the B at position 11 is P or A.
16. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 12 is E or D.
17. (Original) The plasmin inhibitor of claim 9, wherein the B at position 13 is T or I.
18. (Original) The plasmin inhibitor of claim 9, wherein the X at position 15 is P, S or R.
19. (Previously presented) The plasmin inhibitor of claim 9, wherein the Z at position 17 is K, N, E, D or R.
20. (Original) The plasmin inhibitor of claim 9, wherein the X at position 18 is D, G, A or V.
21. (Original) The plasmin inhibitor of claim 9, wherein the X at position 19 is F, N, K or R.
22. (Original) The plasmin inhibitor of claim 9, wherein the X at position 20 is T, P, F or I.
23. (Original) The plasmin inhibitor of claim 9, wherein the B at position 21 is G, V or P.
24. (Original) The plasmin inhibitor of claim 9, wherein the X at position 22 is A, S or R.
25. (Original) The plasmin inhibitor of claim 9, wherein the Ñ at position 24 is Y or H.
26. (Original) The plasmin inhibitor of claim 9, wherein the X at position 26 is S or N.
27. (Original) The plasmin inhibitor of claim 9, wherein the B at position 27 is P, A or T.
28. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 28 may be D or R.
29. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 29 is E, D, H or Q.
30. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 30 is H, K, R or Q.

31. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 31 is K, Q or E.
32. (Original) The plasmin inhibitor of claim 9, wherein the B at position 33 is L or I.
33. (Original) The plasmin inhibitor of claim 9, wherein the Z at position 34 is E or K.
34. (Original) The plasmin inhibitor of claim 9, wherein the B at position 36 is L or I.
35. (Original) The plasmin inhibitor of claim 9, wherein the X at position 41 is E, G or K.
36. (Original) The plasmin inhibitor of claim 9, wherein the B at position 42 is C or G.
37. (Original) The plasmin inhibitor of claim 9, wherein the X at position 48 is K, N or I.
38. (Original) The plasmin inhibitor of claim 9, wherein the X at position 50 is K, Q or I.
39. (Currently amended) The plasmin inhibitor of claim 8 or claim 9, wherein the polypeptide comprises a leader peptide comprising ~~the sequence: Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser~~ {SEQ ID NO:14} SEQ ID No:14.
40. (Currently amended) The plasmin inhibitor of claim 39, wherein the polypeptide is selected from the group consisting of: SEQ ID NO: 16, SEQ ID NO: 18, SEQ ID NO: 20, SEQ ID NO: 22, SEQ ID NO: 24, SEQ ID NO: 26

~~(a) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Asp-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-Glu-Lys-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala~~ {SEQ ID NO:16};

~~(b) Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Glu-Leu-Cys-Glu-Leu-Pro-Pro-Asp-Thr-Gly-Pro-Cys-Arg-Val-Arg-Phe-Pro-Ser-Phe-Tyr-Tyr-Asn-Pro-Asp-~~

~~Glu-Gln-Lys-Cys-Leu-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Glu-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala~~ {SEQ ID NO:18};

(c) ~~Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Asn-Phe-Cys-Lys-Leu-Pro-Ala-Glu-Thr-Gly-Arg-Cys-Asn-Ala-Lys-Ile-Pro-Arg-Phe-Tyr-Tyr-Asn-Pro-Arg-Gln-His-Gln-Cys-Ile-Glu-Phe-Leu-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Lys-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala~~ {SEQ ID NO:20};

(d) ~~Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-His-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Glu-Thr-Gly-Ser-Cys-Lys-Gly-Asn-Val-Pro-Arg-Phe-Tyr-Tyr-Asn-Ala-Asp-His-His-Gln-Cys-Leu-Lys-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Lys-Thr-Ile-Glu-Glu-Gly-Lys-Ser-Thr-Cys-Ala-Ala~~ {SEQ ID NO:22};

(e) ~~Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Leu-Pro-Asp-Thr-Gly-Ser-Cys-Glu-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Thr-Arg-Asp-Arg-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Gly-Gly-Asn-Ala-Asn-Asn-Phe-Ile-Thr-Lys-Glu-Glu-Cys-Glu-Ser-Thr-Cys-Ala-Ala~~; {SEQ ID NO:24}; and

~~Met-Ser-Ser-Gly-Gly-Leu-Leu-Leu-Leu-Leu-Gly-Leu-Leu-Thr-Leu-Trp-Glu-Val-Leu-Thr-Pro-Val-Ser-Ser-Lys-Asp-Arg-Pro-Lys-Phe-Cys-Glu-Leu-Pro-Ala-Asp-Ile-Gly-Pro-Trp-Asp-Asp-Phe-Thr-Gly-Ala-Phe-His-Tyr-Ser-Pro-Arg-Glu-His-Glu-Cys-Ile-Glu-Phe-Ile-Tyr-Gly-Gly-Cys-Lys-Gly-Asn-Ala-Asn-Asn-Phe-Asn-Thr-Gln-Glu-Gln-Cys-Glu-Ser-Thr-Cys-Ala-Ala~~; {SEQ ID NO:26}.

41. (Withdrawn) An isolated polynucleotide encoding the polypeptide of claim 8.

42. (Withdrawn) An isolated polynucleotide selected from the group consisting of:

(a) AAGGACCGTCCGGATTTCTGTGAACTGCCTGCTGACACCGGACCATGTA
GAGTCAGATTCCCATCCTTCTACTACAACCCAGATGAAAAAAGTGCTAGAG
TTTATTTATGGTGGATGCGAAGGGAATGCTAACAATTTTATCACCAAAGAGG
AATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:1];

- (b) AAGGACCGTCCAGAGTTGTGTGAACTGCCTCCTGACACCGGACCATGTA
GAGTCAGATTCCCATCCTTCTACTACAACCCAGATGAACAAAAATGCCTAGA
GTTTATTTATGGTGGATGCGAAGGGAATGCTAACAATTTTATCACCAAAGAG
GAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:3];
- (c) AAGGACCGTCCAAATTTCTGTAAACTGCCTGCTGAAACCGGACGATGTA
ATGCCAAAATCCCACGCTTCTACTACAACCCACGTCAACATCAATGCATAGA
GTTTCTCTATGGTGGATGCGGAGGGAATGCTAACAATTTTAAGACCATTAAG
GAATGCGAAAGCACCTGTGCTGCATGA [SEQ ID NO:5];
- (d) AAGGACCATCCAAAATTCTGTGAACTCCCTGCTGAAACCGGATCATGTA
AAGGCAACGTCCCACGCTTCTACTACAACGCAGATCATCATCAATGCCTAAA
ATTTATTTATGGTGGATGTGGAGGGAATGCTAACAATTTTAAGACCATAGAG
GAAGGCAAAAGCACCTGTGCTGCCTGA [SEQ ID NO:7];
- (e) AAGGACCGTCCAAAATTCTGTGAACTGCTTCCTGACACCGGATCATGTGA
AGACTTTACCGGAGCCTTCCACTACAGCACACGTGATCGTGAATGCATAGAG
TTTATTTATGGTGGATGCGGAGGGAATGCTAACAATTTTATCACCAAAGAGG
AATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:9];
- (f) AAGGACCGTCCAAAGTTCTGTGAACTGCCTGCTGACATCGGACCATGGG
ATGACTTTACCGGAGCCTTCCACTACAGCCCACGTGAACATGAATGCATAGA
GTTTATTTATGGTGGATGCAAAGGGAATGCTAACAACCTTTAATACCCAAGAG
CAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID NO:11];
- (g) a biologically-active polynucleotide fragment of any one of SEQ ID NOS 1, 3, 5, 7, 9, 11, 12, 14, 16, 18 and 20; and
- (h) a polynucleotide homologue of any of the foregoing sequences.

43. (Withdrawn) The polynucleotide of claim 42 further comprising a nucleotide sequence encoding a leader peptide.

44. (Withdrawn) The polynucleotide of claim 43, wherein the nucleotide sequence comprises the sequence:-

ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCTCTGGGAGGTG
CTGACCCCCGTCTCCAGC [SEQ ID NO:13] or a biologically active fragment thereof,
or a polynucleotide homologue of these.

45. (Withdrawn) The polynucleotide of claim 43, wherein said polynucleotide is selected from the group consisting of:

- (a) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCGGATTTCTGTGAACTGCCTG
CTGACACCGGACCATGTAGAGTCAGATTCCCATCCTTCTACTACAACCCAGA
TGAAAAAAGTGCCTAGAGTTTATTTATGGTGGATGCGAAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:15];

(b) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAGAGTTGTGTGAACTGCCTC
CTGACACCGGACCATGTAGAGTCAGATTCCCATCCTTCTACTACAACCCAGA
TGAACAAAAATGCCTAGAGTTTATTTATGGTGGATGCGAAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:17];

(c) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAATTTCTGTAAACTGCCTG
CTGAAACCGGACGATGTAATGCCAAAATCCCACGCTTCTACTACAACCCACG
TCAACATCAATGCATAGAGTTTCTCTATGGTGGATGCGGAGGGAATGCTAAC
AATTTTAAGACCATTAAGGAATGCGAAAGCACCTGTGCTGCATGA [SEQ ID
NO:19];

(d) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCATCCAAAATTCTGTGAACTCCCTG
CTGAAACCGGATCATGTAAAGGCAACGTCCCACGCTTCTACTACAACGCAGA
TCATCATCAATGCCTAAAATTTATTTATGGTGGATGTGGAGGGAATGCTAAC
AATTTTAAGACCATAGAGGAAGGCAAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:21];

(e) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAAATTCTGTGAACTGCTTC
CTGACACCGGATCATGTGAAGACTTTACCGGAGCCTTCCACTACAGCACACG
TGATCGTGAATGCATAGAGTTTATTTATGGTGGATGCGGAGGGAATGCTAAC
AATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:23];

(f) ATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCACCCCTCTGGGAG
GTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAAAGTTCTGTGAACTGCCTG
CTGACATCGGACCATGGGATGACTTTACCGGAGCCTTCCACTACAGCCCACG
TGAACATGAATGCATAGAGTTTATTTATGGTGGATGCAAAGGGAATGCTAAC
AACTTTAATACCCAAGAGCAATGCGAAAGCACCTGTGCTGCCTGA [SEQ ID
NO:25]; and

(g) GGAGCTTCATCATGTCTTCTGGAGGTCTTCTTCTCCTGCTGGGACTCCTCA
CCCTCTGGGAGGTGCTGACCCCCGTCTCCAGCAAGGACCGTCCAGAGTTGTG
TGAAGTGCCTCCTGACACCGGACCATGTAGAGTCAGATCCCCATCCTTCTACT
ACAACCCAGATGAACAAAAATGCCTAGAGTTTATTTATGGTGGATGCGAAGG
GAATGCTAACCAATTTTATCACCAAAGAGGAATGCGAAAGCACCTGTGCTGC
CTGAATGAGGAGACCCTCCTGGATTGGATCGACAGTTCCAATTGACCCAAA
GACCCTGCTTCTGCCCTGGACCACCCTGGACACCCTTCCCCCAAACCCACCC
TGGACTAATTCCTTTTCTCTGCAATAAAGCTTTGGTTCCAGCT [SEQ ID NO:43]

46. (Original) A pharmaceutical composition for alleviating blood loss in a patient, said composition comprising the polypeptide of claim 8 and a pharmaceutically acceptable carrier.

47. (Withdrawn) A method for alleviating blood loss comprising the step of administering to a patient in need of such treatment a therapeutically effective dosage of the polypeptide of claim 8 in combination with a pharmaceutically acceptable carrier.
48. (Withdrawn) An anti-tumour agent comprising the polypeptide of claim 8 conjugated with an anti-fibrin antibody.
49. (Currently amended) The plasmin inhibitor of claim 1, **further** comprising the amino acid sequence ECESTCAA (SEQ ID NO. 68).
50. (Previously presented) The plasmin inhibitor of claim 1, further comprising the amino acid sequence NANNF (SEQ ID NO. 69).
51. (Previously presented) The plasmin inhibitor of claim 49, further comprising the amino acid sequence YGGC (SEQ ID NO. 70).
52. (Previously Presented) The plasmin inhibitor of claim 1, which is conjugated to an anti-fibrin antibody.
53. (Previously Presented) The plasmin inhibitor of claim 1, wherein “substantially pure” means that at least 75% of the total material in the preparation is the plasmin inhibitor.
54. (Previously Presented) The plasmin inhibitor of claim 1, wherein “substantially pure” means that at least 90% of the total material in the preparation is the plasmin inhibitor.
55. (Previously Presented) The plasmin inhibitor of claim 1, wherein “substantially pure” means that at least 95% of the total material in the preparation is the plasmin inhibitor.